

REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

In the specification, paragraphs have been amended on pages 6-8.

Claims 2, 3, 17, 19-21, and 35 are requested to be cancelled.

Claims 1, 8, 15, 22, 23, 24, 27 and 32 are currently being amended.

After amending the claims as set forth above, claims 1, 4-16, 18, and 22-28 are now pending in this application.

Examiner Interview

An interview was conducted between Applicants' representative and Examiner Oropeza on December 23, 2003. The restriction of Claims 29-35 was discussed as was the rejection of Claim 15 (as unamended) in light of Selker et al. and Nakamura. Agreement was not reached, and many of the same arguments made by Applicants' representative have been repeated below.

Election/Restriction

On page 2 of the Office Action, Claims 29-35 were stated as being directed to an invention that is independent or distinct from the previously prosecuted claims. The examiner then stated that Claims 1-28 were constructively elected and withdrew Claims 29-35 from consideration. Applicants respectfully traverse the restriction and election. In order for the examiner's actions to be proper, the examiner must show that Claims 1-28 are independent or distinct from Claims 29-35.

Claims 1 and 29 are not independent. There is a clear relationship between Claims 29-35 and Claim 1 as each claim covers the preferred embodiment shown in the application

using similar terminology. Further, reference to “an exercise stress test device” is a more narrow recitation of “an instrument” which could be a dependent claim off of Claim 1.

Thus, to establish that the two inventions are properly restrictable, the examiner must state that the inventions are “distinct” which, by reference to MPEP 802.01, means that the two sets of claims in the application are novel and unobvious over each other.

The examiner’s statement that the Claim 1 and Claim 29 are distinct appears to disagree with a later argument made by the examiner in rejecting Claim 1. Claim 29 teaches all of the elements of Claim 1 except for “a component for selectively activating and deactivating the illuminating component.” Thus, in stating that Claim 1 is distinct from Claim 29, the examiner is essentially stating that Claim 1 would not be obvious based on the teachings of Claim 29 since Claim 1 teaches “a component for selectively activating and deactivating the illuminating component.” On page 3 of the Office Action, the examiner states that Nakamura teaches a switch (6) and that it would be obvious to include such a switch in a device such as Selker et al. to selectively activate and deactivate the illuminating component. Thus, there is an inherent contradiction in the examiner’s arguments with respect to the restriction of Claim 29 and the rejection of Claim 1.

Applicants respectfully request that the examiner choose which argument the examiner would like to make; that inclusion of a switch is obvious or that inclusion of a switch is not obvious.

If the examiner believes that the switch is obvious, then restriction was improper and Applicants respectfully request that the restriction of Claims 29-35 be withdrawn. In this case, Applicants respectfully request that Claims 29-35 be indicated as allowable or the finality of the Office Action be withdrawn since Claims 29-35 have not yet been rejected.

If the examiner believes that the switch is not obvious, then rejection of Claim 1 is improper and withdrawal of the rejection of Claim 1 is respectfully requested. If this is the case, Applicants respectfully request that Claims 1, and 4-7 be indicated as allowable or the finality of the Office Action be withdrawn since Claims 1, and 4-7 will need to be rejected on a new grounds of rejection.

Claim Rejections – 35 U.S.C. § 103

A. Rejection of Claims 1, 3, 15, 16, 18-20, and 24-28 over Selker et al. in view of Nakamura

On page 2 of the Office Action, Claims 1, 3, 15, 16, 18-20, and 24-28 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Selker et al. (US 5,501,229) in view of Nakamura (US 6,380,921). Each of the independent claims have been amended to incorporate limitations similar to Claims 21, the rejection of which is discussed below.

B. Rejection of Claims 2, 4, and 17 over Selker et al. in view of Nakamura and further in view of Polley et al.

On page 6 of the Office Action, Claims 2, 4, and 17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Selker et al. (US 5,501,229) in view of Nakamura (US 6,380,921) and further in view of Polley et al. (US 5,868,487). Each of the independent claims have been amended to incorporate limitations similar to Claims 21, the rejection of which is discussed below.

C. Rejection of Claims 5-14, 22, and 23 over Selker et al. in view of Nakamura and further in view of Nelms et al.

On page 7 of the Office Action, Claims 5-14, 22, and 23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Selker et al. (US 5,501,229) in view of Nakamura (US 6,380,921) and further in view of Nelms et al. (US 4,365,290). Each of the independent claims have been amended to incorporate limitations similar to Claims 21, the rejection of which is discussed below.

Claim 23 further recites that “the predetermined period of time is at least 60 minutes.” In the Office Action at page 4, the examiner states that “a 60 minute predetermined time period would have been an obvious design choice” citing Col. 4, lines 48-54 of Nakamura. Col. 4, lines 48-54 does not provide any teaching of a specific time period. Further, a time of period of an hour or more would appear to be a long time to view the data of the instrument of Selker et al. (the modified reference) without using an input device of Selker et al. As discussed below, Selker et al. is directed to an instrument for monitoring a patient, where a

user's interaction with the instrument is to enter data relating to the patient and to respond to alarms. In either of these cases, it is unlikely that a user would need sixty minutes from a time when a key has been pressed in either of these uses of the system of Selker et al. to provide "sufficient time to review the results on the screen" as stated in the Office Action. In contrast, the inventors of the present application have discovered that a sixty minute period of review is a useful period of time to meet the objectives of providing a user sufficient time to review the results and not necessitate that a user re-activate the illuminating component. Thus, since one of ordinary skill in the art would not be motivated to modify Selker et al. to provide a time period of at least sixty minutes, withdrawal of the rejection of Claim 23 is respectfully requested.

D. Rejection of Claim 21 over Selker et al. in view of Nakamura and further in view of Gallant et al.

On page 8 of the Office Action, Claim 21 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Selker et al. (US 5,501,229) in view of Nakamura (US 6,380,921) and further in view of Gallant et al. (US 4,316,249). Claim 21 has been cancelled and Claims 1, 15, 24, and 27 have incorporated the limitations of Claim 21. Discussion of the rejection of Claim 21 will be made with respect to Claim 15 which has incorporated all of the limitations of Claim 21.

As recognized by the Office Action, none of the cited references teaches every element of Claim 15. In order to arrive at the invention claimed in Claim 15 using Selker et al. as a primary reference, Selker et al. must be modified 1) to include a light source, 2) to direct the light source at a medium with a waveform printed on by the printing component, 3) to include a component for deactivating the illuminating component, 4) to have the deactivating component controlled based on use of a key of the instrument, and 5) to incorporate the elements of Gallant et al.

With respect to 1), Applicant disagrees that one of ordinary skill in the art would have been motivated to add a light source, such as the one taught in Nakamura, to the device of Selker et al. On page 3 of the Office Action, the examiner argues that one of ordinary skill in the art would have been motivated to add a light source to the instrument Selker et al. in order to use the instrument in dark environments. The examiner's proposed motivation is not

believed to be applicable since the examiner's motivation relies on use of the instrument of Selker et al. in dark environments, and the examiner has not established that one of ordinary skill in the art would have been motivated to use the instrument of Selker et al. in dark environments. Specifically, the instrument of Selker et al. is designed for use in monitoring patients who may have heart conditions such as those associated with ischemia. See Col. 1, lines 6-7 and 57-59. A clinician's interaction with the monitor of Selker et al. is limited to entering initial data and responding to alarms. See Col. 3, lines 40-41 and Col. 4 lines 37-39 and 48-52. It appears that these alarms will only come after a period of hours. See examples at Col. 6, line 15 to Col. 7, line 64. Nothing in Selker et al. suggests that a clinician would need to interact with the monitor of Selker et al. in a dark environment; the monitor of Selker et al. appears to be used with little interaction from a clinician, the patient's treated with the instrument of Selker et al. do not appear to be located in dark environments, and, if an alarm were to be triggered, it would likely be easier to treat a patient suffering from heart disease if the patient were not in a dark environment. Thus, there appears to be no motivation to use the instrument of Selker et al. in a dark environment.

Further, Gallant et al. does not teach or suggest use in a dark environment. Rather, Gallant et al. teaches that data can be obtained from a holter recording system which had previously been connected to a patient. See Col. 1, lines 9-12, and Col. 5, lines 49-54. Gallant et al. teaches that this data is then analyzed automatically by a machine or by a user using an oscilloscope and CRT display for conditions of a patient evident from the holter tape. See Col. 1, lines 49-53 and Col. 2, lines 18-23. There is no teaching or suggestion that a user analyzing a holter tape, not in the presence of a patient, would need to operate in a dark environment. Thus, there is no suggestion that the analysis machine of Gallant et al. would be operated in a dark environment.

Further still, if the examiner maintains that the system of Selker et al. was likely to be used in dark environments and use of a light source was an obvious solution for using the system of Selker et al. in dark environments, Applicants respectfully request that the examiner offer an explanation as to why Selker et al. did not teach or suggest such a light source.

Since the examiner's proposed motivation relies on use of the device of Selker et al. in dark environments, and since the examiner has not established that one of ordinary skill in the art would have used or been motivated to use the device of Selker et al. in dark environments, the examiner's proposed motivation is not believed to be applicable. If there was no reason to use the instrument of Selker et al. in a dark environment, there would be no reason to add a light source to the instrument of Selker et al., let alone meet the other limitations of Claim 15. Thus, one of ordinary skill in the art would not be motivated to combine the references cited by the examiner. Withdrawal of the rejection of Claim 15 is respectfully requested for at least this reason.

With respect to item 2), there is no suggestion to illuminate a medium with a waveform printed on by the printing component using an illuminating component. The Office Action states that one of ordinary skill in the art would have been motivated to direct a light at the printer of Gallant et al. to "continuously monitor the cardiac readings and make adjustments as needed." Gallant et al. does not teach that the ECG data is continuously monitored based on the data printed on the printer. Rather, Gallant et al. teaches that the ECG data is monitored based on data shown on the oscilloscope. See Col. 2, lines 15-23 and 50-53, and Col. 4, lines 13-18. The purpose of including the printer in Gallanet et al. is to make a hard copy of the data which is believed to be relevant, which hard copy may be made for the purpose of keeping a record for the patient. See Col. 2, lines 29-30 and Col. 3, lines 3-7. Thus, even if the system of Gallant et al. or Selker et al. were to be used in a dark environment, since a user need not look at the waveform printed by the printer of Gallant et al., there would be no motivation to use an illuminating component that directed illumination towards a medium printed by the printer.

Further, Gallant et al. is the reference relied on for the teaching that it would be desirable to illuminate a waveform printed on a medium. Since the system of Gallant et al. would not need to be used in a dark environment, the incorporation of the teachings of Gallant et al. would not suggest, to one of ordinary skill in the art, that a waveform printed on a paper be illuminated.

With respect to 4), Claim 15 recites “a component for automatically turning the illuminating component off, after a predetermined period of time has elapsed since a user pressed a key of the instrument... [and] a printing component for printing on a medium a graphical waveform representing the electrical activity of the heart... wherein the illuminating component illuminates the medium as it moves along the work surface.” None of the references cited teach illuminating a medium on which a waveform is printed using an illuminating component, where the illuminating component may be turned off automatically based on a lack of actuation of a key of the instrument of which the printing component is attached. Rather, Nakamura teaches that a light source 20 is used to illuminate a touch panel 2a and that power is shut-off to the light source 20 used to illuminate the touch panel based on use of the touch panel. In other words, the light source is automatically turned off based on use of the item illuminated by the light source. Further, as recognized by the Office Action, Selker et al. and Polley et al. do not teach the use of an illuminating component or an automatic shut-off component. Further still, nothing in the combination of references would teach or suggest this element. Since none of the references teach or suggest this combination of elements of Claim 15, Claim 15 is believed to overcome the rejection over the cited references.

With respect to 5), the Office Action does not address the fact that Selker et al. and Gallant et al. are directed to two different uses. Selker et al. is directed to a device for actively monitoring a patient which device is placed in the vicinity of a patient. See Col. 1, lines 57-59. Gallant et al., on the other hand, is directed to a device that receives and analyzes large amounts of data acquired from a patient over a long period of time (such as 24 hours) from a tape, which device is operated by a clinician. See Col. 1, lines 9-12. The active monitoring function of Selker et al. would not be as effective if data was only obtained for review once a day. Thus, one of ordinary skill in the art would not have been motivated to implement the holter structures of Gallant et al. in the monitoring system of Selker et al.

Claims 1, 8, 22, 24, and 27 are independent and have limitations similar to Claim 15. These claims are believed to be allowable for reasons similar to Claim 15. The remainder of the claims depend from one of independent claims 1, 8, 15, 22, 24, and 27 and are believed to be allowable for at least the same reasons as the claim from which they depend.

Specification

On page 9 of the Office Action, the disclosure was objected to because certain parts were mis-numbered in paragraphs [0020], [0024], and [0027] of the disclosure and were not fixed by the preliminary amendment of 1/18/02. The specification has been amended to correct the deficiencies cited in the Office Action in the manner suggested in the Office Action. These amendments are supported by the drawings and the numbering of those same items elsewhere in the disclosure, and therefore do not add new matter.

Conclusion

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

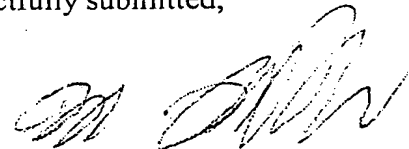
The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 50-2401. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to

Deposit Account No. 50-2401. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 50-2401.

Respectfully submitted,

Date Feb. 10, 2007

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